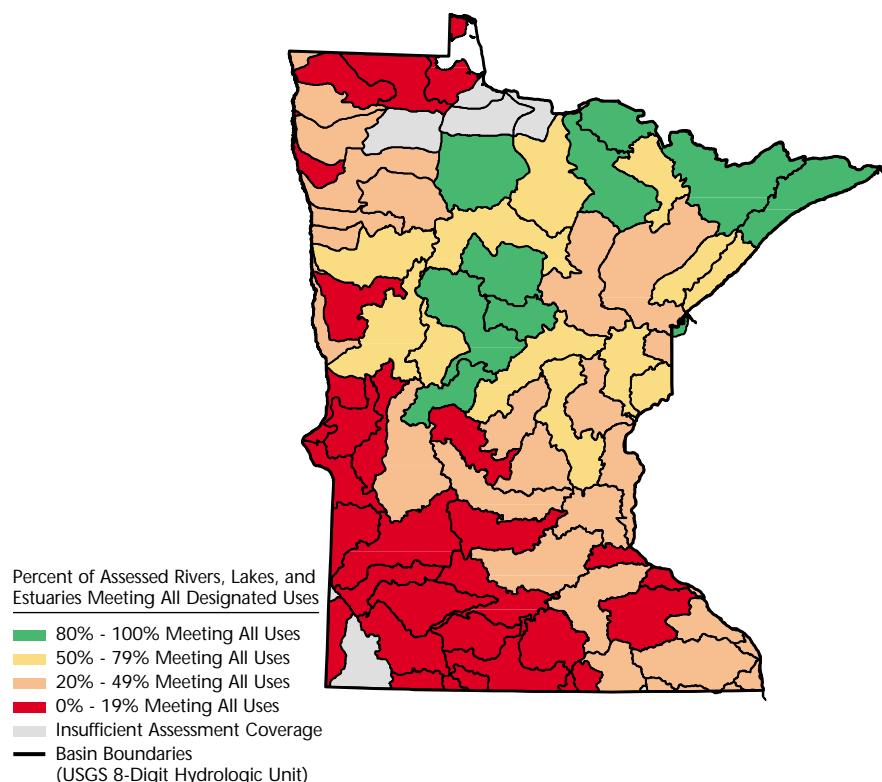


# Minnesota



For a copy of the Minnesota 1998 305(b) report, contact:

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## Surface Water Quality

As part of its basin management approach, Minnesota reported on three basins for the state's 1998 305(b) report—the Upper Mississippi, Lower Mississippi, and St. Croix River basins. More than 50% of the state-assessed river miles have good quality that fully supports aquatic life uses, and 26% of the state-assessed rivers and over 67% of the state-assessed lake acres fully support swimming. The most common problems identified in rivers are bacteria, turbidity, nutrients, siltation, and dissolved oxygen. Nonpoint sources generate most of the pollution in rivers. Minnesota's

272 miles of Lake Superior shoreline have fish consumption advisories. These advisories recommend some limits on fish meals consumed for certain species and size classes. Most of the pollution originated from point sources has been controlled, but runoff (especially in agricultural regions) still degrades water quality.

## Ground Water Quality

Ground water supplies the drinking water needs of 70% of Minnesota's population. The Minnesota Pollution Control Agency's (MPCA) Ground Water Monitoring and Assessment Program evaluates the quality of ground water. The program published several major reports in 1998, including statewide assessments of 100+ ground water constituents and of nitrates specifically. The program has now shifted emphasis to problem investigation and effectiveness monitoring, at local and small-regional scales.

## Programs to Restore Water Quality

Basin Information Documents (BIDs) will include the 305b waterbody assessments as well as information on a wide variety of water resource issues and subjects. The BIDs will also include GIS maps depicting the locations of permitted feedlots in the state system and relative numbers of animal units per feedlot by major watershed. Based on the BIDs, teams will target specific waterbodies and watersheds for protection, restoration, or monitoring. Specific strategies will be spelled out.

## Programs to Assess Water Quality

In the 1998 assessments, in addition to monitoring data collected by MPCA, data from the Metropolitan Council, U.S. Geological Survey, Long-Term Resource Monitoring Project, Mississippi Headwaters Board, local Clean Water Partnership projects and Hennepin County were used.

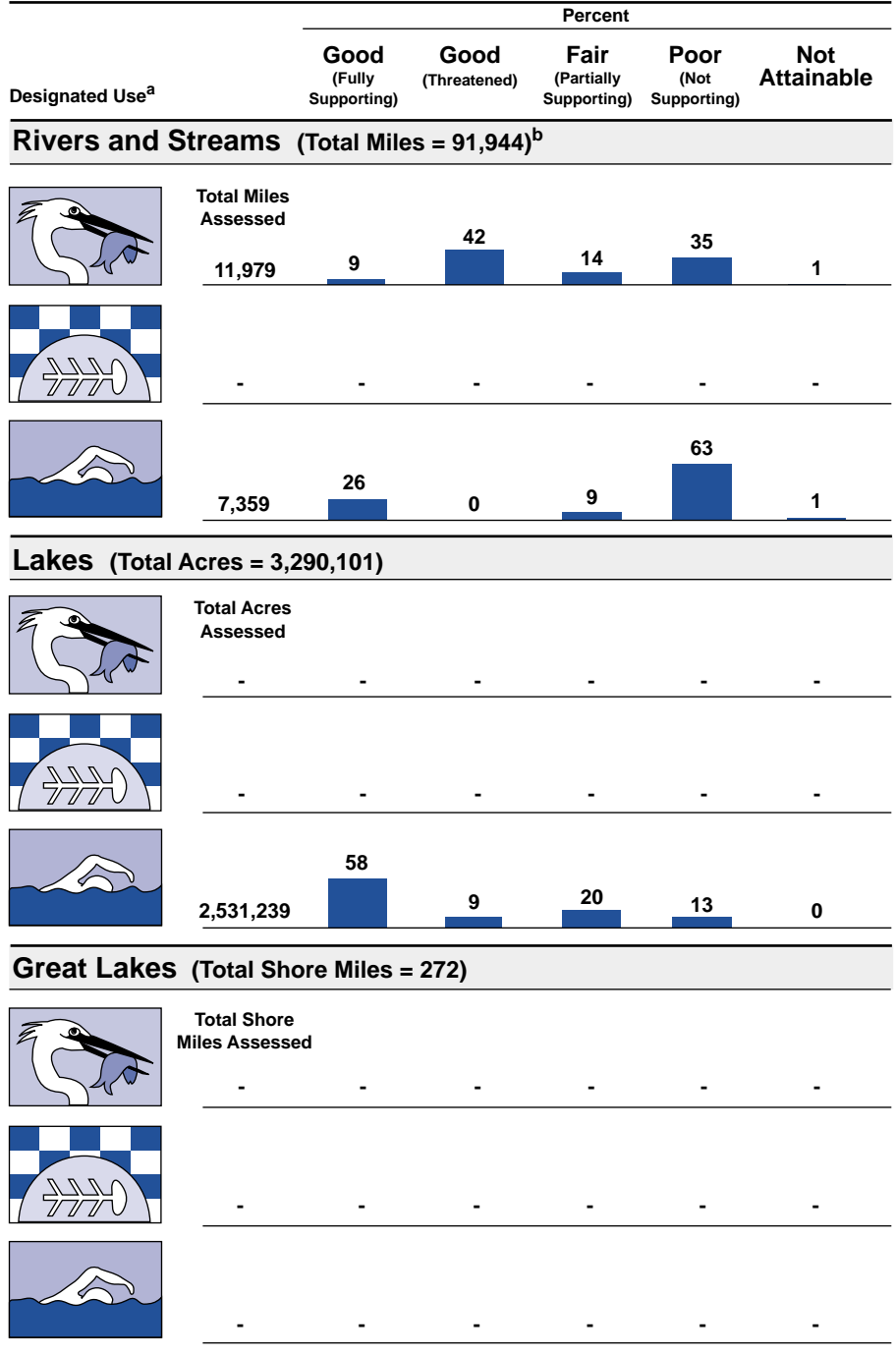
Minnesota maintains an Ambient Stream Monitoring Program with 82 sampling stations, and approximately 40 sites are visited each year. The state also performs fish tissue sampling, sediment monitoring, intensive surveys, and lake assessments and supports a citizen lake monitoring program.

In 1996, Minnesota piloted a statistically based water quality monitoring program in the St. Croix River basin. The program used multiple indicators to evaluate resource quality including fish and macroinvertebrate community structure, habitat, flow and basic water chemistry. Additional sites provided the data to develop regional biocriteria.

The state is developing biological assessment methods and criteria for depressional and riparian wetlands. A pilot effort is underway to develop a citizen wetland assessment program in cooperation with selected local governments.

The MPCA continues to be involved with field investigations into the cause of frog malformities. Partnerships with the National Institute of Environmental Health and the USGS Water Resources Division and Biological Resources Division have been particularly useful in carrying out teratogenic assays, histopathological studies, and water flow patterns at study sites.

## Individual Use Support in Minnesota



- Not reported in a quantifiable format or unknown.

<sup>a</sup> A subset of Minnesota's designated uses appear in this figure. Refer to the state's 305(b) report for a full description of the state's uses.

<sup>b</sup> Includes nonperennial streams that dry up and do not flow all year.

Note: Figures may not add to 100% due to rounding.